

REMARKS

Status of the Claims

Claims 20 and 21 have been cancelled.

Claim 1 has been amended to recite a process comprising 3 steps. Support for this amendment can be found in originally filed Claim 1.

Claim 2 has been amended to replace “is constituted of” with “consists essentially of”.

Claims 3 to 13 have been amended to replace “characterized in that” with “wherein”.

Claims 9, 12, 13 and 14 have been amended to comply with amended claim 1. Support for these amendments can be found in the originally filed claims.

Claims 18 and 19 have been amended to restore clarity. Support for these amendments can be found in the originally filed claims.

No new matter has been added.

1. Claim Objection

The Examiner has objected claim 2 for redundancy with claim 1. Claim 2 has been amended to define the formulation as “consists essentially of …”; this rendering the rejection moot.

Claim 18 has been objected to for lack of clarity. Applicant submits that claim 18 has been amended to overcome the rejection by use of the wording suggested by the Examiner. Withdrawal of the corresponding objection is requested.

Claim 19 has been objected to for referring both to the process of claim 13 and to the concentrate of claim 17. Claim 19 has now been amended to refer only to the concentrate of claim 17. Withdrawal of the corresponding objection is respectfully requested.

2. Claim Rejection under 35 U.S.C. § 112

The Examiner considers that claims 1-19 are indefinite since claim language does not set forth the specific steps used in order.

Applicant submits that claim 1 has been amended such that it now recites a process for obtaining cryoprecipitable proteins comprising 3 steps (a), (b) and (c). Considering that the method recited in amended claim 1 is now outlined with an organized series of steps, Applicant considers that the pending claims are now clear and unambiguous.

Withdrawal of the corresponding rejection is respectfully requested.

3. Objection for lack of Novelty

In the Office Action, the Examiner considers that the subject matter of claims 1 and 14-18 is anticipated by *Branovic et al.* (Applied Biochemistry and Biotechnology, vol. 69, 1998, pages 99-111). The Examiner purports in particular that *Branovic* discloses a process for virally inactivating a composition containing FVIII and further stabilizers, such as trisodium citrate, wherein said composition is freeze-dried and submitted to heat treatment.

Applicant respectfully disagrees for the following reasons.

Applicant submits that *Branovic et al.* discloses an improved procedure for purifying Factor VIII and comprising a double virus inactivation step. This document discloses in particular that the

corresponding virus inactivation steps were actually tested on FVIII compositions resulting only from two different purification methods:

- method 1 which is described from page 101, line 20 to page 102, line 14, and
- method 2, which is described in *Myers et al.*, Vox Sanguinis, 1991, 60: 141-147.

Branovic et al. unambiguously discloses, at page 102, lines 9-1, that when method 1 is used, the purified FVIII is conditioned in a composition containing 0.3M glycine, 0.005 M CaCl₂ 2H₂O, and 0.044 M sucrose, pH 7.0, before being freeze-dried.

Similarly, *Myers et al.* unambiguously discloses, at page 143, left column, lines 6 to 9, that FVIII is redissolved after precipitation and before freeze-drying in the final buffer disclosed at page 142, left column, lines 23-25, i.e. in a buffer containing 0.02 M sodium citrate, 0.04 M glycine, 0.06M NaCl, 0.005M calcium chloride and 1.5% sucrose at pH 7.1.

On the contrary, the present invention is directed to a process for obtaining cryoprecipitable proteins comprising a step of contacting a composition of cryoprecipitable protein(s) of interest with a stabilizing and solubilizing formulation comprising a mixture of arginine, at least one hydrophobic amino acid and trisodium phosphate.

As disclosed in particular at page 6, lines 26 to 35 of the present application, it is the specific combination of arginine, of at least one hydrophobic amino acid and of trisodium citrate, which provides the formulation of the invention with "*a marked improvement of the solubilization of the freeze-dried forms (of the cryoprecipitable proteins) after the heat treatment of virus inactivation*".

Further, Applicant respectfully submits that, as disclosed in the present specification, carbohydrates such as sucrose should be avoided from the formulation added to cryoprecipitable proteins before freeze-drying, since "*their effect slows down the virus inactivation*", and since

“some carbohydrates, such as maltose or sucrose, cannot be safely used with subjects suffering from kidney deficiency and/or diabetes” (see the present application, at page 5, lines 23-35).

Applicants therefore considers that *Branovic et al.* fails to disclose any composition or formulation comprising the specific combination of arginine, of at least one hydrophobic amino acid and of trisodium citrate, as well as it fails to disclose the use of such a composition in a process for preparing cryoprecipitable proteins. Further, Applicant submits that the presence of sucrose in the compositions disclosed in *Branovic et al.* or in *Myers et al.* even renders these compositions unsuitable for use in the process of the invention.

In view of the above mentioned elements, Applicant submits that the subject matter of claims 1 and 14-18 is novel over the disclosure of *Branovic et al.* and withdrawal of the corresponding rejection is respectfully requested.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Leonard R. Svensson Reg. No. 30,330 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

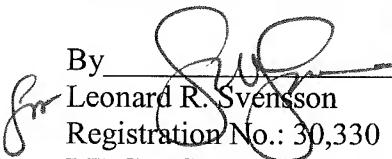
Application No. 10/563,620
Amendment dated June 4, 2009
Reply to Office Action of December 29, 2008

Docket No.: 0040-0168PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: June 4, 2009

Respectfully submitted,

By 
Leonard R. Svensson
Registration No.: 30,330
BIRCH, STEWART, KOLASCH & BIRCH, LLP
12770 High Bluff Drive
Suite 260
San Diego, California 92130
(858) 792-8855
Attorney for Applicant